

## SUBJECT TEACHING GUIDE

### 532 - Study of conditions in the coastal dynamics of a beach

#### Master's Degree in Coasts and Ports

Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	Master's Degree in Coasts and Ports			Type and Year	Optional. Year 1
Faculty	School of civil Engineering				
Discipline					
Course unit title and code	532 - Study of conditions in the coastal dynamics of a beach				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. CIENCIAS Y TECNICAS DEL AGUA Y DEL MEDIO AMBIENTE				
Name of lecturer	GABRIEL DIAZ HERNANDEZ				
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Office	Edificio IH Cantabria. Planta: + 2. DESPACHO (225)				
Other lecturers	RAUL MEDINA SANTAMARIA				

3.1 LEARNING OUTCOMES
- - Being able to diagnose the degree of stability of a beach
- - Being able to assess the impact of the works on coastal dynamics
- - Being able to perform a technical report covering the above aspects (diagnosis, affection of the works and tracking)
- - Being able to explain and defend a technical report as referred to above, presenting the results in a concise and clear form
- The student will become fluent with the current numerical tools used to characterize, predict and study coastal dynamics and morphodynamics
- The student will learn the study methodology and the use and application of numerical tools included in the SMC for the study of coastal projects
- The student will learn the morphodynamic evolution of the beaches

#### 4. OBJECTIVES

The aim of the course is to provide students with practical knowledge for the design and project activities on the coast, particularly in regard to the affection of works on the coastal morphodynamics .

#### 6. COURSE ORGANIZATION

##### CONTENTS

1	Structure of a study of impact of works to the coastal dynamics and the case study presentation
2	Study site morphology
3	Maritime climate of the study site
4	Coastal morphodynamics of the study site
5	Impact of works to the coastal dynamics and tracking plan
6	Case presentation

## 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Morphology of the study area (Oral presentation)	Others	No	Yes	5,00
Coastal Dynamics in the coast (Oral Presentation)	Others	No	Yes	15,00
Coastal Morphodynamics and functional model of the beach (Oral Presentation)	Others	No	Yes	20,00
Affections to the beach and proposal of alternatives (Oral presentation)	Others	No	Yes	20,00
At the end of the study, the students will present and defend during a oral presentation the complete case and present a final report of the study	Work	Yes	No	40,00
<b>TOTAL</b>				<b>100,00</b>

### Observations

Continuous evaluation will be carried out throughout the course.  
The assessment criteria for evaluation will take this into account:

- Participation in class and interest shown.
- Mastering the basic concepts set out in the subject.
- Be able to apply the knowledge acquired, solving practical problems.
- Present the proposed work in a correct manner.

The instruments used to carry out the evaluation will be:  
Practical activities and partial tests carried out will have the same weight on the final grade.  
The minimum grade to pass the course must be a 4.0 in total.  
Repeated unjustified lack of attendance and punctuality in the course classes may result in the loss of continuous assessment.

Only for duly justified causes (eg sanitary restrictions), the evaluations may be organized remotely, with prior authorization from the Center's Directorate.

### Observations for part-time students

Part-time students will apply the same assessment criteria as full-time students. The temporary distribution of activities will be adapted to the particular conditions of each student when deemed necessary.

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

### BASIC

Archivo de estudios de afección de obras a la morfodinámica de playas